U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
ASSISTANT SECRETARY FOR HOUSING-FEDERAL HOUSING COMMISSIONER

MATERIALS RELEASE NO. 1276

Series and Series Number :

DIRECTORS, HOUSING DIVISION
DIRECTORS, MULTIFAMILY DIVISION
DIRECTORS, SINGLE FAMILY DIVISION

ISSUE DATE: January 7, 1997

REVIEW DATE: January 7, 2000

SUBJECT:

Vanex Crosslinked Polyethylene (PEX) Plastic Pipe and Fittings

2. Name and Address Vanguard Piping Systems, Inc. of Manufacturer 831 North Vanguard Street McPherson, KS 67460

Data on the nonstandard product described herein have been reviewed by the Department of Housing and Urban Development and determination has been made that it is considered suitable from a technical standpoint for the use indicated herein. This Release does not purport to establish a comparative quality or value rating for this product as compared to standard products normally used in the same manner.

This Materials Release cannot be used as an indication of endorsement, approval or acceptance by MUD of the described product, and any statement or representation, however made, indicating such approval, endorsement or acceptance by MUD is unauthorized. See Code 18, U.S.C. 709.

Any reproduction of this Release must be in its entirety.

<u>USE</u>: The Vanguard Piping Systems, Inc. Vanex crosslinked polyethylene (PEX) plastic pipe and fittings system is intended for use in potable hot and cold water distribution systems up to a maximum continuous pressure of 160 psi at 73°F and 100 psi at 180°F. It may also be used in hydronic radiant heating systems.

DESCRIPTION:

The Vanguard Piping Systems, Inc. Vanex PEX water distribution system shall be made from high density polyethylene having a minimum density of 59 lbs/ft³. The pipe shall have one standard dimension ratio (SDR9) and the fittings shall have a nominal size for 3/8" to 1". Only fittings recommended by Vanguard Piping Systems, Inc. are acceptable for use with this PEX system.

REQUIREMENTS:

The Vanguard Piping Systems, Inc. Vanex PEX water distribution system shall comply with the following standards:

ASTM F 876-93 "Standard Specification for Crosslinked Polyethylene (PEX) Tubing"

ASTM F 877-93 "Standard Specification for Crosslinked Polyethylene (PEX) Plastic Hot and Cold Water Distribution Systems"

Vanguard 61-95-06-96 "Fitting Standard"

NSF 14-93 "Standard for Plastic Piping System Components and Related Materials". The tubing and fittings shall comply with all of the performance requirements as outlined in NSF-14.

NSF 61-93 "Standard for Drinking Water Systems Components Health Effects"

QLTP32VS-96 "Vanguard Installation Guidelines for PEX"

INSTALLATION:

- 1. The Vanguard Piping Systems, Inc. Vanex PEX plastic pipe and fitting system shall be installed according to the manufacturer's instructions described in Vanguard's PEX Installation Guidelines 1996.
- 2. Only fittings approved by Vanguard Piping Systems, Inc. shall be used.
- 3. The PEX plastic pipe shall not be exposed to direct sun light for more than 30 days.
- 4. Do not install PEX pipe within 6" of any gas appliance vents, or within 12" of any recessed light fixtures.
- 5. PEX plastic pipe should not be anchored rigidly but allow 3/8" to 1/2" per yard of pipe for thermal expansion.

CERTIFICATION:

Vanguard Piping Systems, Inc. certifies that the Vanex crosslinked polyethylene pipe and fittings and systems shall be produced in conformance to this MR, and are in compliance with a validation program at NSF International, Inc., in accordance with the Code of Federal Regulations, 24 CFR 200.935. NSF International, Inc. shall inspect the manufacturer's facility to assure that the quality control procedures are being followed. Four samples of this product shall be selected and tested each year to validate the manufacturer's conformance to the requirements of this MR. Each pipe and fittings certified as conforming to this MR, shall be labeled with the following information:

- 1. The NSF validation mark.
- 2. The manufacturer's name.
- 3. The manufacturer's conformance to this MR.
- 4. The fittings made from polysulfone resin shall be identified as PLS.

WARRANTY:

Vanguard Piping Systems, Inc. warrants the Vanex crosslinked polyethylene pipe and fittings systems for ten years (10), under normal use, against defects in materials and workmanship. Should any defect or poor performance occur, Vanguard Piping Systems, Inc. will make a full cost allowance for the replacement of the defective product.

MANUFACTURER'S RESPONSIBILITIES:

Issuance of this Materials Release (MR) commits the manufacturer to fulfill, as a minimum, the following:

- 1. Produce, label and certify the material, product or system in strict accordance with the terms of this MR.
- 2. Provide necessary corrective action in a timely manner for all cases of justified complaint, poor performance or failure reported by HUD.
- 3. When requested, provide the Office of Consumer and Regulatory Affairs, Manufactured Housing and Standards Division, HUD Headquarters, with a representative list of properties, in which the material, product or system has been used, including complete addresses or descriptions of locations and dates of installation.
- 4. Inform HUD in advance of changes in production facilities, methods, design of the product, company name, ownership or mailing address.

EVALUATION:

This MR shall be valid for a period of three years from the date of initial issuance or most recent renewal or revision, whichever is later. The holder of this MR shall apply for a renewal or revision 90 days prior to the Review Date printed on this MR. Submittals for renewal or revision shall be sent to HUD Headquarters. Appropriate user fees shall be sent to:

U. S. Department of Housing and Urban Development Technical Suitability of Products Fees P. O. Box 954199 St. Louis, MO 63195-4199

The holder of this MR may apply for revision at any time prior to the Review Date. Minor revision may be in the form of a supplement to the MR.

If the Department determines that a proposed renewal or supplement constitutes a revision, the appropriate User Fee for a revision will need to be submitted in accordance with Code of Federal Regulations 24 CFR 200.934, "User Fee System for the Technical Suitability of Products Program," and current User Fee Schedule.

CANCELLATION:

Failure to apply for a renewal or revision shall constitute a basis for cancellation of the MR. HUD will notify the manufacturer that the MR may be canceled when:

- conditions under which the document was issued have changed so as to affect production of, or to compromise the integrity of the accepted material, product, or system,
- the manufacturer has changed its organizational form without notifying HUD, or
- 3. the manufacturer has not complied with responsibilities it assumed as a condition of HUD's acceptance.

However, before cancellation, HUD will give the manufacturer a written notice of the specific reasons for cancellation, and the opportunity to present views on why the MR should not be canceled. No refund of fees will be made on a canceled document.